## REMARKS

The Office Action dated December 19, 2003, has been received and carefully considered. Claims 1-24 are pending in the present application.

Reconsideration of the outstanding rejection in the present application is respectfully requested based on the following remarks.

At the outset, Applicants note with appreciation the indication on page 4 of the Office Action that claims 5, 9, and 13 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, Applicants have opted to defer rewriting the above-identified claims in independent form pending reconsideration of the arguments presented below with respect to the rejected claims.

I.  THE ANTICIPATION REJECTION OF CLAIMS 1-4, 6-8, 10-12, 14-24

On pages 2-4 of the Office Action, claims 1-4, 6-8, 10-12, and 14-24 were rejected under 35 U.S.C. § 102(e) as being anticipated by Chang et al. (U.S. Patent No. 6,525,850). This rejection is hereby respectfully traversed.

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. In re

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Sun, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. Id.. "In addition, the prior art reference must be enabling." Akzo N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1479, 1 USPQ2d 1241, 1245 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987). That is, the prior art reference must sufficiently describe the claimed invention so as to have placed the public in possession of it. In re Donohue, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985). "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his own knowledge to make the claimed invention." Id..

Regarding claim 1 and 19, the Examiner asserts that Chang et al. discloses the claimed invention. Specifically, the Examiner asserts that Chang et al. discloses a method for routing data within an optical network having a plurality of network nodes (Figures 1-4, 6, and 7 of Chang et al.). The Examiner also asserts that Chang et al. discloses receiving data at a first network node via a first optical signal having a first wavelength, the first wavelength corresponding to a first optical frequency, the first optical frequency being mapped to a

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first binary representation, the first binary representation

being divided into a first plurality of fields, at least one of

the first plurality of fields corresponding to a routing label

in a first label stack; a top routing label in the first label

stack indicating a second network node (Figure 2 of Chang et

al.). The Examiner further asserts that Chang et al. discloses

transmitting the data from the first network node to the second

network node via a second optical signal having a second

wavelength, based at least partially upon the top routing label

(column 8, line 29 to column 14, line 64, of Chang et al.).

However, it is respectfully submitted that a thorough

reading of Chang et al. reveals that Chang et al. does not in

fact teach the claimed invention. Specifically, nowhere does

Chang et al. claim, disclose, or even suggest mapping a first

optical frequency to a first binary representation, as presently

claimed. In fact, the only mention of binary representations by

Chang et al. is that of binary label switch states and local

switch addresses, both of which are derived based on incoming

and outgoing network element ports (see column 13, line 21, to

column 14, line 12), and not optical frequencies as presently

claimed. Also, the binary label switch states and local switch

addresses disclosed by Chang et al. remain constant along a flow

path (see column 15, lines 23-36), whereas the presently claimed

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mappings of optical frequencies to binary representations will differ within a network depending upon the particular optical routing frequencies. Further, Chang et al. fails to disclose a first binary representation being divided into a first plurality of fields, at least one of the first plurality of fields corresponding to a routing label in a first label stack, and a top routing label in the first label stack indicating a second network node, as claimed. In contrast, the binary label switch states disclosed by Chang et al. correspond to entire IP addresses which are not divided, and the binary local switch addresses disclosed by Chang et al. correspond to incoming and outgoing network element ports and not routing labels or entire network nodes. Accordingly, it is respectfully submitted that Chang et al. does not anticipate claims 1 and 19.

Claims 2-4, 6-8, 10-12, 14-18, and 20-24 are dependent upon independent claims 1 and 19. Thus, since independent claims 1 and 19 should be allowable as discussed above, claims 2-4, 6-8, 10-12, 14-18, and 20-24 should also be allowable at least by virtue of their dependency on independent claims 1 and 19. Moreover, these claims recite additional features which are not claimed, disclosed, or even suggested by the cited references taken either alone or in combination. For example, Chang et al. does not in fact teach popping a top routing label off a first

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label stack so as to promote a next routing label in the first label stack (claim 2). Also, Chang et al. does not in fact teach a second wavelength corresponding to a second optical frequency, the second optical frequency being mapped to a second binary representation, the second binary representation being divided into a second plurality of fields, at least one of the second plurality of fields corresponding to a routing label in a second label stack, and a top routing label in the second label stack indicating a third network node (claims 3, 7, and 11). Further, Chang et al. does not in fact teach a top routing label in a second label stack corresponding to a next routing label in the first label stack (claims 4 and 10). Additionally, Chang et al. does not in fact teach swapping a top routing label in a first label stack with a new routing label when the first label stack contains more than two routing labels (claims 6, 8, and 12). Still further, Chang et al. does not in fact teach one of a first plurality of fields corresponding to a termination field indicating an end of a first label stack (claims 16 and 22). Additionally still, Chang et al. do not in fact teach one of a first plurality of fields corresponding to a contention field for differentiating a first wavelength from a third wavelength (claims 17 and 23).

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In view of the foregoing, it is respectfully requested that the aforementioned anticipation rejection of claims 1-4, 6-8, 10-12, and 14-24 be withdrawn.

## II. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

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Respectfully submitted,

Hunton & Williams LLP

By:

Thomas E. Anderson
Registration No. 37,063

TEA/vrp

Hunton & Williams LLP
1900 K Street, N.W.
Washington, D.C. 20006-1109
Telephone: (202) 955-1500
Facsimile: (202) 778-2201

Date: March 17, 2004

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